



NOTES:

1. MATERIAL: MAKE FROM TRD MFG. INC.
AIR CYLINDER CAT. #TA-MF1D-1 1/2 X 4.724 HC -MPR-VS
REF. SOURCE: FLUID POWER CO.
660 FARGO ELK GROVE VILLAGE, IL. 6007
2. NO GREASEN OR TEFLON COATING IS ALLOWED
TO BE USED AS LUBRICANT
3. NO ELASTOMER MATERIAL SHALL BE USED AS SEAL OR
WIPER EXCEPT VITON GRADED FOR AT LEAST 200°C
4. LUBRICATE ALL OF THE VITON SEALS WITH DOW CORNING 710
FLUID LUBRICANT. THEN TEST THE CYLINDER FOR PROPER
ACTUATION AND WIPE OUT ANY EXCESS OIL. DOW CORNING
710 IS NOT DESIRABLE IN THE VACUUM. CARE MUST BE
EXERCISED TO AVOID CONTAMINATION OF THE VACUUM
CHAMBER DURING ASSEMBLY, TEST AND SHIPMENT
- 5.MAGNETIC STRIP SHALL BE ORIENTED FOR REED SWITCH
2. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY

SYN	CHANGE DESCRIPTION	BY	CHKD	DATE

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES		THIS DRAWING IS THE PROPERTY OF		
TOLERANCES		ARGONNE NATIONAL LABORATORY		
DECIMALS	ANGULAR	TITLE		
.X ±.1 [2.5]	± 0°30'	ADVANCED PHOTON SOURCE		
.XX ±.01 [0.25]		P8-60 I.D.		
.XXX ±.005 [0.13]		MONO. INTEGRAL SHUTTER		
SURFACE ROUGHNESS 125 ✓		AIR CYLINDER		
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.				
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1				
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5				
DO NOT SCALE DRAWING				
LOG NUMBER		P8620001-00		
DRAWN BY		DATE	CHIEF DESIGN ENGINEER	DATE
MUSCIA		12/23/98	D. Shu	1/27/98
CHECKED BY		DATE	GP LEADER	DATE
J. CHANG		1/23/98	T.M. Kuzay	2/5/98
DESIGNER		DATE	PROJECT MGR.	DATE
CHANG/MUSCIA		12/23/97		
RESPONSIBLE ENGINEER		DATE	APPROVED/RELEASED	DATE
J. CHANG		1/23/98		
MATERIAL		SEE NOTE #1		
		SCALE	HALF	SIZE
		SHEET	1 of 1	B
		DRAWING NUMBER		
		P8-620001-00		